## ABSTRACT OF THE DISCLOSURE

The present invention discloses a digital image pickup apparatus. The digital image pickup apparatus reads digital image data from a main memory in a horizontal direction. The digital image pickup apparatus corrects an optical distortion component in the horizontal direction in the digital image data. The digital image pickup apparatus writes the digital image data into the main memory in the horizontal direction, so as to store it without changing the direction. The digital image pickup apparatus further reads the digital image data from the main memory in a vertical direction. The digital image pickup apparatus corrects an optical distortion component in the vertical direction in the digital image data. The digital image pickup apparatus writes the digital image data into the main memory in the vertical direction, so as to store it without changing the direction.